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Abstract

A method for inducing differentiation of monocytes contained in an extracorporeal quantity of a subject's blood into functional dendritic antigen presenting cells is provided. The monocytes are induced to differentiate into dendritic cells by activation forces resulting from flow of the monocytes through a plastic channel, such as the plastic channel in a conventional photopheresis apparatus. Functional dendritic cells generated from induced monocytes are incubated together with apoptotic or inactivated disease effector agents to enhance the presentation of at least one disease-causing antigen expressed by the disease effector agents. Compositions including dendritic cells derived from induced monocytes and compositions including such dendritic cells incubated with disease effector agents are also provided for use in immunotherapeutic treatment.